THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

MOBILE TELECOMMUNICATIONS	§	
TECHNOLOGIES, LLC,	§	
	§	
V.	§	CASE NO. 2:13-CV-946-JRG-RSP
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ZTE (USA) INC., et al.	8	
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MOBILE TELECOMMUNICATIONS	§	
TECHNOLOGIES, LLC,	8	
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V.	8	CASE NO. 2:13-CV-948-JRG-RSP
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ZTE (USA) INC., et al.	8 8	
LIL (USA) INC., et al.	8	

CLAIM CONSTRUCTION MEMORANDUM AND ORDER

On February 16, 2016, the Court held a hearing to determine the proper construction of the disputed claim terms in United States Patents No. 5,754,946 and 5,809,428. After considering the arguments made by the parties at the hearing and in the claim construction briefs (Dkt. Nos. 93, 96 & 102), ¹ the Court issues this Claim Construction Memorandum and Order.

page numbers assigned by the Court's electronic docket unless otherwise indicated.

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¹ Citations to documents (such as the parties' briefs and exhibits) in this Claim Construction Memorandum and Order refer to the page numbers of the original documents rather than the

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I. BACKGROUND

Plaintiff brings suit alleging infringement of United States Patents No. 5,754,946 ("the '946 Patent") and 5,809,428 ("the '428 Patent") (collectively, the "patents-in-suit"). The Court addresses the disputed terms below on a patent-by-patent basis. The only remaining Defendant is HTC America, Inc.

Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with preliminary constructions for the disputed terms with the aim of focusing the parties' arguments and facilitating discussion as to those terms. Those preliminary constructions are set forth below within the discussion for each term.

II. LEGAL PRINCIPLES

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To determine the meaning of the claims, courts start by considering the intrinsic evidence. *See id.* at 1313; *see also C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312-13; *accord Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can aid in determining the claim's meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314-15.

"[C]laims 'must be read in view of the specification, of which they are a part." Id. at 1315 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)); accord Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id.* The specification may also resolve the meaning of ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." Teleflex, 299 F.3d at 1325. But, "[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims." Comark Commc'ns, Inc. v. Harris Corp., 156 F.3d 1182, 1187 (Fed. Cir. 1998)

(quoting Constant v. Advanced Micro-Devices, Inc., 848 F.2d 1560, 1571 (Fed. Cir. 1988)); accord Phillips, 415 F.3d at 1323.

The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent."). "[T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance." *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985).

Although extrinsic evidence can be useful, it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317 (citations and internal quotation marks omitted). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition are entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

In general, prior claim construction proceedings involving the same patents-in-suit are "entitled to reasoned deference under the broad principals of *stare decisis* and the goals articulated by the Supreme Court in *Markman*, even though *stare decisis* may not be applicable

per se." Maurice Mitchell Innovations, LP v. Intel Corp., No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006) (Davis, J.); see TQP Development, LLC v. Inuit Inc., No. 2:12-CV-180, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J.) ("[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so."); see also Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 839-40 (2015) ("prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority") (citation omitted); Finisar Corp. v. DirecTV Grp., Inc., 523 F.3d 1323, 1329 (Fed. Cir. 2008) (noting "the importance of uniformity in the treatment of a given patent") (quoting Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996)).

III. THE PARTIES' STIPULATED TERMS

The parties have reached agreement on constructions for certain terms, as stated in their November 23, 2015 P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. No. 75 at Ex. A) and their February 4, 2016 P.R. 4-5(d) Joint Claim Construction Chart (Dkt. No. 106, Ex. A at 1, 6, 8 & 15). The parties' agreements are detailed in Appendix A to this Claim Construction Memorandum and Order.

IV. DISPUTED TERMS IN U.S. PATENT NO. 5,754,946

The '946 Patent is titled "Nationwide Communication System." The '946 Patent issued on May 19, 1998, and was filed on September 21, 1993. The Abstract of the '946 Patent summarizes the invention as directed to:

A two-way communication system for communication between a system network and a mobile unit. The system network includes a plurality of base transmitters and base receivers included in the network. The base transmitters are divided into zonal assignments and broadcast in simulcast using multi-carrier modulation techniques. The system network controls the base transmitters to broadcast in simulcast during both systemwide and zonal time intervals. The system network

dynamically alters zone boundaries to maximize information throughput. The system also uses a mobile unit which receives messages from the network and transmits messages to the network. The mobile unit includes a switch that allows a user to request the network to retransmit a received message that contains errors.

The Court previously addressed the '946 Patent in *Mobile Telecommunications Technologies, LLC v. Sprint Nextel Corp., et al.*, No. 2:12-cv-832-RSP, Dkt. No. 162 (E.D. Tex. May 2, 2014) ("*Sprint*"); *see* Civil Action Nos. 2:13-cv-258-RSP (consolidated with *Sprint* and sometimes referred to as "*Apple*"), 2:13-CV-259-RSP (consolidated with *Sprint* and sometimes referred to as "*Samsung*").

In that case, the Court also addressed claim construction in a Memorandum Order denying Defendant Apple Inc.'s Motion for Summary Judgment. See Sprint, Dkt. No. 384 (E.D. Tex. Nov. 7, 2014) ("Apple Summary Judgment Order"). The Court then addressed the term "retransmission" in a Memorandum Order granting in part and denying in part Plaintiff's Emergency Motion for Claim Construction in Samsung. See Samsung, Dkt. No. 81 (E.D. Tex. Dec. 11, 2014) ("Samsung Supplemental Order"). Further, the Court addressed the '946 Patent in Mobile Telecommunications Technologies, LLC v. Amazon.com, Inc., No. 2:13-CV-883, Dkt. No. 79 (E.D. Tex. Nov. 5, 2014) ("Amazon"), and Mobile Telecommunications Technologies, LLC v. LG Electronics Mobilecomm USA, Inc., No. 2:13-CV-947, Dkt. Nos. 94, 229 (E.D. Tex. May 13, 2015) ("LG").

Finally, the Northern District of Texas addressed the '946 Patent in *Mobile Telecommunications Technologies, LLC v. Blackberry Corp.*, No. 3:12-CV-1652, Dkt. No. 244 (N.D. Tex. May 8, 2015) ("*Blackberry*") (attached to Defendant's response brief as Exhibit F).

A. "displayed message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"the particular message that is currently being displayed; the message includes and refers to the entire content of the original transmitted message even if less than all of the content was received or displayed"	"the radio frequency message actually received by the mobile unit from the network and shown to the user on the display"

The parties submit that this term appears in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at pp. 5-6 of 10; Dkt. No. 106, Ex. A at 2. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "the particular message that is being displayed, at least partially, on the mobile unit."

(1) The Parties' Positions

Plaintiff argues that this term "is not limited to the actual content of a particular message as it is displayed on the mobile device." Dkt. No. 93 at 4. Plaintiff also asserts: "Instead, 'displayed message' refers to the entirety of the 'said message' that is currently being 'displayed' on the mobile device. Thus, 'displayed' is used to identify a particular message among many that may have been received by the mobile unit – it does not define a new message based on the actual content being displayed." *Id.* Further, Plaintiff urges:

[T]he content of the "displayed" message . . . includes non-received and non-displayed content that is part of the originally transmitted message. Otherwise, if the content of the "displayed message" was limited to what was actually received and displayed, the user would never be able to select a portion of the "displayed message" for retransmission that was anything other than what was already being displayed on the mobile unit.

Id. at 4-5.

Defendant responds by emphasizing that the specification states "[t]he user *reads the message* and determines whether the displayed message is acceptable." Defendant urges that "[t]he 'displayed message' is the message actually received and depicted to the user." Dkt.

No. 96 at 5 (quoting '946 Patent at 17:14-15) (emphasis Defendant's). Defendant argues that "[t]he prosecution history also makes it clear that the 'displayed message' is the text shown to the user on the display." Dkt. No. 96 at 6. Further, Defendant submits, "issued Claim 1 requires structure for 'receiving a radio frequency message from the network,' and next requires structure for 'displaying said message.' The claim refers to the received and viewable words as the 'displayed message.'" *Id.* Finally, Defendant argues that the prior constructions cited by Plaintiff "did not previously construe the specific term here under consideration" and "are taken out of context in view of the different terms in dispute." *Id.* at 6-7.

Plaintiff replies that the Court addressed the term "displayed message" in *Amazon*. Dkt. No. 102 at 1. Plaintiff concludes that "[b]ecause the portion is not limited to exactly what has been received and displayed, there is no requirement that 'retransmission' also be so limited as to require that a retransmission can only occur after a first transmission of the message from the communications network to the mobile unit." *Id.* at 2 (citations and internal quotation marks omitted).

(2) Analysis

In *Sprint*, the dispute focused on whether the phrase "a portion" could refer to some *or all* of a displayed message, and the Court found [] "[t]he patentee . . . reinforced during prosecution that 'a portion of a message' is something less than the 'entire message." *Sprint* at 25. The Court construed "a portion of the displayed message" and "a portion of a displayed message" to mean "less than the entire displayed message" and "less than an entire displayed message," respectively. *See id.* at 21-25.

In *Amazon*, "[a]t the October 17, 2014 hearing, the parties presented competing views regarding whether clicking on an attachment icon (or perhaps a link) within an e-mail constitutes

requesting retransmission of a portion of a message." *Amazon* at 12. The Court found that "the [] intrinsic evidence demonstrates that 'message' and 'displayed message' are not limited to the exact text displayed on an end user's device. Instead, the terms 'message' and 'displayed message' serve to distinguish between different messages, each of which might be viewed in part or in whole by a user." *Id.* at 16; *see id.* at 10-16; *see also id.* at 15 (rejecting position that "the only data that would qualify as a 'retransmission' is the *exact* data that was previously displayed on the screen of the end user's device, errors and all"). The Court also arrived at this conclusion in *LG. See LG* at 11-16.

The disputed term appears in Claims 1 and 8 of the '946 Patent, which recites (emphasis added):

1. A mobile unit for transmitting and receiving radio frequency signals to and from a communications network comprising:

means for receiving a radio frequency message from the network; a display for displaying said message;

a switch actuatable to specify a portion of *the displayed message* for which a user desires retransmission from the communications network;

means for transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message; and

means for receiving said specified portion retransmitted from the communications network and for displaying the received specified portion on the display.

* * *

8. A method for receiving and transmitting messages at a mobile unit, comprising the steps of:

receiving at the mobile unit a radio frequency message;

displaying said message on the mobile unit;

receiving an indication of a portion of *the displayed message* for which a user desires retransmission;

transmitting, only upon receipt of the indication, a signal requesting retransmission of said indicated portion of *said message*;

receiving a retransmission of said indicated portion; and

displaying the received retransmission of said indicated portion on the mobile unit.

Claim 1, for example, states that the "said message" displayed is a "message" that was received from a communications network. *See Energizer Holdings Inc. v. Int'l Trade Comm'n*, 435 F.3d 1366, 1371 (Fed. Cir. 2006) (holding that "an anode gel comprised of zinc as the active anode component" provided implicit antecedent basis for "said zinc anode"). Although the term "displayed message" requires that a message be displayed, Defendant has not shown that the entire contents of such a message must all be displayed. Nothing in the prosecution history cited by Defendant demands such a narrow reading. *See* Dkt. No. 96 at 2-4; *see also id.* at Ex. D; *see, e.g., id.*, Jan. 11, 1996 Proposed Amendment Under 37 C.F.R. § 1.116 at 3 (MTEL-HTC0000276) ("After viewing the received message displayed on the display, a user can elect whether to request a portion of the message to be retransmitted.").

In other words, Defendant's proposal that the "displayed message" must be "as displayed to the user" would improperly limit the term to exactly the content that appears on a display screen. Instead, the context of the specification demonstrates the term "message" refers to something that has been sent, regardless of whether the "message" is only partially displayed. *See, e.g.,* '946 Patent at 4:63-64 ("communicating messages to a mobile unit"), 9:23-25 ("an autonomous acknowledgment signal which indicates that the mobile unit accurately received the message"), 10:54-57 ("the network operations center may determine from the probe signal that the mobile unit is simply located in a different zone than the zone that the message was first sent"), 15:17 ("the message was properly received), 15:30-32 ("indicate to the network operations center that the user has not viewed the message even though the mobile unit properly received it"), 15:40-41 ("request retransmission of a message corrupted by errors"), 16:10-11, 16:47-48, 16:55 ("message 1620 displayed on the screen 1606"), 17:9-10 ("retransmit received messages, or partial messages containing errors"), 17:51, 20:59-64, 21:67-22:2 ("message . . . for

delivery to the user"), 27:15-35, 30:63-64 & 31:9-10 ("if a message was successfully delivered to a mobile transceiver"); *see also id.* at 29:53, 29:67-30:1, 30:25, 30:29-30, 30:59, 30:65-66, 31:32 & 31:37 (number of messages successfully delivered).

The Court therefore expressly rejects Defendant's proposed construction for substantially the same reasons set forth in *Amazon*. *See Amazon* at 10-16; *see also LG* at 11-16. In light of the intrinsic evidence, the Court's prior findings, and the context of the surrounding claim language, the Court hereby construes "displayed message" to mean "the particular message that is being displayed, at least partially, on the mobile unit."

B. "said message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"a most oulon masses on among all masses and that	"the nedic frequency masses are sived from
"a particular message among all messages that	"the radio frequency message received from
have been received by the mobile unit; the	the network"
message includes and refers to the entire	
content of the original transmitted message	
even if less than all of the content was	
received"	

The parties submit that this term appears in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 5 of 10; Dkt. No. 106, Ex. A at 2. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "a radio frequency message received, at least partially, from the network."

(1) The Parties' Positions

Plaintiff argues that "[s]aid message' refers to and identifies a particular message that has been received. Plaintiff also argues that the scope of the 'said message' is not limited to the content of the message as it is received." Dkt. No. 93 at 6. Plaintiff refers to its arguments for the term "displayed message" and argues that Defendant's proposed construction is contrary to the Court's findings in *Amazon*. *Id.* at 6-7. Finally, Plaintiff argues Defendant's proposed

construction "merely repeats elements otherwise present in the claim without clarifying the meaning." *Id.* at 7.

Defendant responds that "[Plaintiff's] erroneous construction ignores the claim language, the meaning of 'said,' and is buried behind a tortured, error-filled argument regarding 'displayed message." Dkt. No. 96 at 5. Plaintiff replies as to this term together with the term "displayed message," which the Court has addressed above. *See* Dkt. No. 102 at 1-2.

(2) Analysis

The Court has not previously addressed "said message" as a distinct term. This term appears in Claims 1 and 8 of the '946 Patent, which are quoted above as to the term "displayed message." The claim language clearly shows that "said message" refers back to "a radio frequency message" that is recited earlier in the claims.

As noted in *Amazon*, "the specification refers to the 'message' as something that might not be received or might not be received completely or properly" (*Amazon* at 13-14):

If the mobile unit 624 *does not completely receive the message*, it can generate and broadcast a negative acknowledge signal. The negative acknowledge signals when delivered to the network operations center 600, indicates [sic] that retransmission of the message is necessary.

'946 Patent at 9:26-30 (emphasis added).

A set of input switches 1516 is provided to allow the user to input a reply to a received message, or to otherwise generate a message to be transmitted by the mobile transceiver. The input switches 1516 also include a switch that allows the user to request retransmission of a *message corrupted by errors*.

Id. at 15:38-40 (emphasis added).

With the six button reply option provided by mobile transceiver 1500, a three bit message may be transmitted by the mobile transceiver to the base receivers. The two remaining states of the three bit message may be used by the transmit logic 1518 for the autonomous acknowledgment signal which indicates that the message has been properly received, and for the autonomous negative

acknowledgment signal which indicates that the *message has not been completely* or properly received.

The request retransmission button 1622 allows the user to request the base transmitters to retransmit received messages, or partial messages containing errors. When the mobile unit receives a message containing errors, it displays the message on display 1606 with the erroneous portions highlighted (e.g., underlined, placed in brackets, or printed in reverse video). The user reads the message and determines whether the displayed message is acceptable. If not, the user can cause the system to retransmit the message, or the erroneous portions, by pressing request retransmission button 1622. By pressing button 1622, the user causes the transmit logic 1518 to transmit a signal to the base receivers indicating that the user wishes the message or a partial message to be retransmitted. The base transmitters then retransmit the message to the mobile unit at an appropriate time.

Id. at 16:66-17:23 (emphasis added).

In light of this evidence as well as the evidence cited to the term "displayed message," above, the Court finds that Defendant has not demonstrated the entire contents of a message must all be received. The Court therefore construes "said message" to mean "a radio frequency message received, at least partially, from the network."

C. "requesting retransmission of said specified portion of said message" and "requesting retransmission of said indicated portion of said message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"requesting retransmission of less than the	"asking that the specified portion of said
entire content of the message that the user has	message (as construed) be transmitted from the
selected for retransmission, the prior	network again"
transmission of the selected portion need not	
be from the same source"	

The parties submit that these terms appear in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 7 of 10; Dkt. No. 106, Ex. A at 4. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning apart from the Court's analysis of the terms 'displayed message,' 'said message,' and 'retransmission."

(1) The Parties' Positions

Plaintiff argues that Defendant's proposed construction "is contrary to this Court's prior constructions of 'retransmission' by requiring a second transmission from the same source to the same destination." Dkt. No. 93 at 8. Defendant responds that "th[e] claim context, taken in view of the proper constructions of 'said message' etc., warrants [Defendant's] requested construction" Dkt. No. 96 at 8. Defendant emphasizes that "the new user-optional alternative to automatic error correction" is "subject matter critical to the alternative 'invention' of the '946 Patent claims." *Id.* at 9. Defendant also cites the prosecution history. *See id.* at 9-10. Defendant concludes the claims "require that at a minimum the user be able to read the displayed message and elect whether or not to request retransmission of a portion of the displayed message that contains an error." *Id.* at 10. Defendant concludes that "[Plaintiff's] efforts to avoid express claim language, critical disclosures added to the CIP [('946 continuation-in-part)] specification and the prosecution history is contrary to the *Phillips* mandate and unwarranted." *Id.* (citing 415 F.3d 1303).

Plaintiff replies as to this term together with the term "displayed message," which is addressed above. *See* Dkt. No. 102 at 1-2. Plaintiff also replies:

[Defendant] further misinterprets the prosecution history to improperly limit the scope of the claims so that any mobile unit that is covered by the independent claims must not feature automatic retransmission of erroneous messages. Although the claims certainly cover such a scenario, the patentee did not disclaim non-automatic retransmission of messages that contain errors during prosecution of the '946 Patent. The patentee instead distinguished prior art that provided for automatic retransmission requests by adding limitations that required the user to view the message (which may be partial or incomplete) before requesting retransmission.

Id. at 2.

(2) Analysis

The parties' dispute as to this term is addressed in the Court's discussion of the terms "displayed message," "said message," and "retransmission." The Court hereby expressly rejects Defendant's proposed construction.

The Court construes "requesting retransmission of said specified portion of said message" and "requesting retransmission of said indicated portion of said message" to have their plain meaning apart from the Court's analysis of the terms "displayed message," "said message," and "retransmission."

D. "receiving a retransmission of said indicated portion" and "displaying the received retransmission of said indicated portion on the mobile unit"

"receiving a retransmission of said indicated portion"		
Plaintiff's Proposed Construction	Defendant's Proposed Construction	
No construction necessary; plain meaning In the alternative: "receiving the indicated portion of the message: the portion does not need to have been previously received or displayed"	"receiving a second, requested retransmission of only the indicated portion of a previously displayed message containing errors"	
"displaying the received retransmission of said indicated portion on the mobile unit"		
Plaintiff's Proposed Construction	Defendant's Proposed Construction	
No construction necessary; plain meaning In the alternative: "displaying the received portion that was requested by the user; the portion does not need to have been previously received or displayed"	"displaying the second, requested retransmission of only the indicated portion of a previously displayed message containing errors"	

The parties submit that these terms appear in Claim 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 8 of 10; Dkt. No. 106, Ex. A at 7. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning apart from the Court's analysis of the terms 'displayed message' and 'retransmission."

(1) The Parties' Positions

Plaintiff argues that Defendant's proposed construction violates the Court's prior constructions by requiring a second transmission of content previously displayed and by limiting the claim scope to messages that contain errors. Dkt. No. 93 at 8-9.

Defendant responds that "[Plaintiff's] proposed constructions ignore the intrinsic evidence and mischaracterize [Defendant's] constructions, while once again improperly using out-of-context snippets of this Court's analysis of different terms." Dkt. No. 96 at 12.

Plaintiff replies as to this term together with the term "displayed message," which is addressed above. *See* Dkt. No. 102 at 1-2.

(2) Analysis

The parties' disagreements as to this disputed term are addressed as to the terms "displayed message" and "retransmission," which are distinct disputed terms addressed separately in the present Claim Construction Memorandum and Order.

The Court therefore construes "receiving a retransmission of said indicated portion" and "displaying the received retransmission of said indicated portion on the mobile unit" to have their plain meaning apart from the Court's analysis of the terms "displayed message" and "retransmission."

E. "retransmission"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"plain and ordinary meaning, with the understanding that a 'retransmission' is not so limited as to require that a retransmission can only occur after a first transmission of the message from the communications network to the mobile unit'; need not be from the same	"plain meaning, but properly construction "plain meaning, but properly construed in the context of 'requesting retransmission of said specified portion of said message'"
source to the same destination; and covers a scenario where data is sent from Point A to Point B and then sent again from Point B to Point C."	

The parties submit that this term appears in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 6 of 10; Dkt. No. 106, Ex. A at 3. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning (expressly adopt the conclusions reached in the *Apple Summary Judgment Order*, the *Samsung Supplemental Order*, *Amazon*, and *LG*)."

(1) The Parties' Positions

Plaintiff submits that Defendant's proposal as to "requesting retransmission of said specified portion of said message" is addressed separately above. Dkt. No. 93 at 9.

Defendant responds that "the dispute over the term 'retransmission' has taken on an unwarranted life of its own. The real issue is not the meaning of that one word in isolation, but its meaning in the context of specific claim limitations in which it is used and the other intrinsic evidence." Dkt. No. 96 at 7. Defendant also argues that Plaintiff's proposed construction "has much greater potential for confusion than the MTel-proposed construction the Court previously declined to adopt." *Id.* Plaintiff replies as to this term together with the term "displayed message," which is addressed above. *See* Dkt. No. 102 at 1-2.

(2) Analysis

In the *Sprint* litigation, the Court found:

[T]he court construes the term "retransmission" to have its plain and ordinary meaning, and further finds that the plain and ordinary meaning of "retransmission" is not so limited as to require that a retransmission can only occur after a first transmission of the message from the communications network to the mobile unit.

Apple Summary Judgment Order at 3 (internal quotation marks omitted).

Also in the *Sprint* litigation, the Court addressed the term "retransmission" in a Memorandum Order granting in part and denying in part Plaintiff's Emergency Motion for Claim Construction. In particular, the Court emphasized that the term "retransmission' is not so limited as to require that a retransmission 'can only occur after a first transmission of the message from the communications network to the mobile unit." *Samsung Supplemental Order* at 3.

In *Amazon*, the Court found that "[a]s to what is necessary to constitute 'retransmission,' and as to whether e-mail attachments meet the limitations at issue, such issues involve details of the accused instrumentalities that are not proper for the Court to consider during these claim construction proceedings." *Amazon* at 16 (citing *PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) ("[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.")). Also of note, the parties in *Amazon* agreed that "retransmission" be given its "plain meaning." *Id.* at 63.

Likewise, in *LG*, the Court found:

On balance, to whatever extent Defendant has argued that the term "retransmission" itself requires a previous transmission "attempt," Defendant's

argument is hereby expressly rejected as lacking support in the intrinsic evidence. To the extent Defendant relies upon surrounding claim language to make such an argument, Defendant's argument involves details of the accused instrumentalities that are not proper for the Court to consider during these claim construction proceedings.

LG at 20 (citation omitted).

The Court adopts these prior findings, but these findings need not be set forth in an explicit claim construction. Plaintiff's proposal in that regard would tend to confuse rather than clarify the scope of the claims and is therefore hereby expressly rejected.²

The Court accordingly construes "retransmission" to have its plain meaning. The Court further hereby adopts the above-quoted conclusions reached in the *Apple Summary Judgment Order*, the *Samsung Supplemental Order*, *Amazon*, and *LG*, and that at trial the parties shall not present any arguments inconsistent with those conclusions.

F. "a portion of the displayed message for which the user desires retransmission"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
"less than the entire content of the particular message currently being displayed for which the user desires retransmission; the portion requested does not need to be previously received or displayed"	"less than the entire displayed message (as construed) for which the mobile user wants retransmission (as construed)"

The parties submit that this term appears in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 5 of 10; Dkt. No. 106, Ex. A at 2. Shortly before the start of the February 16, 2016

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² Also, Plaintiff's reliance upon use of the term "retransmission" in United States Patent No. 4,644,351 ("Zabarsky") is unpersuasive because Plaintiff has not demonstrated that the usage of the term in an unrelated patent is of any significant probative value here. *See* Dkt. No. 93 at 8 n.19 & 9 n.25 (citing *id.*, Ex. 3, Zabarsky at 5:10-12 ("After composition, the message is transmitted to the central site 100, stored, and retransmitted to a designated pager.")); *see also e.Digital Corp. v. Futurewei Techs., Inc.*, 772 F.3d 723, 727 (Fed. Cir. 2014) ("claims of unrelated patents must be construed separately").

hearing, the Court provided the parties with the following preliminary construction: "less than the entire displayed message for which the user desires retransmission."

(1) The Parties' Positions

Plaintiff urges that "[t]he 'portion' is: (i) being requested for retransmission; (ii) less than the displayed message; (iii) not limited to the content actually displayed on the mobile unit; and (iv) need not be received by the mobile unit." Dkt. No. 93 at 10. Defendant responds that its proposed modification to the Court's prior construction "reflects the proper construction of 'displayed message,' based on intrinsic evidence of new matter added to the '946 Patent, [Plaintiff's] clear and unequivocal representations in prosecution, and the Examiner's express reliance on [Plaintiff's] representations." Dkt. No. 96 at 11. In particular, Defendant argues that Plaintiff "clearly and unambiguously disclaimed claim scope, limiting a user's request to only a specified portion of what the user actually viewed[,] to obtain allowance." *Id.* at 12.

Plaintiff replies as to this term together with the term "displayed message," which is addressed above. *See* Dkt. No. 102 at 1-2.

(2) Analysis

The parties' disputes as to constituent terms are addressed above. Also of note, the Court in *Amazon* rejected an "argument that retransmission of message portions can be requested only as to message portions that have actually been displayed." *Amazon* at 16; *see id.* at 15 (rejecting position that "the only data that would qualify as a 'retransmission' is the *exact* data that was previously displayed on the screen of the end user's device, errors and all"). Further, as discussed above as to the term "displayed message," "the specification refers to the 'message' as something that might not be received or might not be received completely or properly." *Id.*

at 13. Nothing in the prosecution history cited by Defendant is contrary to such a reading. *See* Dkt. No. 96 at 11-12; *see also id.* at Ex. D.

The Court therefore applies the same construction for "a portion of the displayed message" that the Court reached in *Sprint* and *Amazon*. *See Sprint* at 24; *see also Amazon* at 16. The Court accordingly construes "a portion of the displayed message for which the user desires retransmission" to mean "less than the entire displayed message for which the user desires retransmission."

G. "mobile unit"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a mobile unit that relies on the user to request retransmission of a message that contains an
In the alternative: "plain meaning"	error"

The parties submit that this term appears in Claims 1 and 8 of the '946 Patent. Dkt. No. 75, Ex. B at p. 5 of 10; Dkt. No. 106, Ex. A at 1. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning."

(1) The Parties' Positions

Plaintiff argues, in full:

The term "mobile unit" has been readily understood by two juries. Several defendants have agreed that the term needs no construction or should be given its plain meaning. [Plaintiff's] construction continues this logical treatment of this term. [Defendant's] construction, in contrast, limits the scope of independent claims 1 and 8 by construing the term "mobile unit" to only apply to messages that contain an error and thereby violates principles of claim differentiation and conflicts with this Court's prior holdings that the independent claims of the '946 Patent are not limited to messages that contain errors.

Dkt. No. 93 at 10.

Defendant responds that the Court should adopt the construction of the Northern District of Texas in *Blackberry* for the reasons set forth therein. Dkt. No. 96 at 13. Plaintiff replies as to this term together with the term "displayed message," which is addressed above. *See* Dkt. No. 102 at 1-2.

(2) Analysis

In *Blackberry*, the Northern District of Texas found that "the specification and prosecution history demonstrate the patentee's disclaimer of claim scope, such that the mobile unit does not automatically request retransmission of a received message that contains an error." *Blackberry*, Ex. A at 8.

During prosecution, the patentee stated:

Independent claim 1, as proposed, defines a mobile unit comprising a unique combination of elements. According to proposed claim 1, the mobile unit includes a display for displaying a received message. Switch means allows a user to selectively request retransmission of a portion of the message from a communications network. Another means transmits, upon actuation of the switch means, a signal to the communications network requesting retransmission of the portion of the message. After viewing the received message displayed on the display, a user can elect whether to request a portion of the message to be retransmitted. For example, if a portion of the message contains an error, but is nonetheless understandable, the user may elect not to request retransmission of the portion containing the error (page 37 of the specification, lines 23-26). Alternatively, if the user is unable to understand the message, the user may elect to request retransmission of the portion containing the error. In this way, the mobile unit of claim 1 maximizes system efficiency in two ways. First, the mobile unit does not automatically request retransmission of a received message when it contains an error. Rather, the user must actuate the switch means to cause the mobile unit of claim 1 to request retransmission. Second, the user can elect retransmission of only a portion of a message, rather than the entire message.

Dkt. No. 96, Ex. D, Jan. 11, 1996 Proposed Amendment Under 37 C.F.R. § 1.116 at 3-4 (MTEL-HTC0000276-77) (emphasis added).

On balance, these statements by the patentee do not warrant imposing Defendant's proposed limitation as to the term "mobile unit." For example, the parties here have separately agreed that the term "switch actuatable" in Claim 1 means "a switch that requires user activation." Dkt. No. 106, Ex. A at 1. Further, Defendant's proposed construction might be interpreted so as to improperly limit the claims to "an error." *See, e.g.*, '946 Patent at Cl. 2 ("The mobile unit of claim 1, further comprising: means for detecting errors in the received message").

The Court therefore hereby expressly rejects Defendant's proposed construction. No further construction is necessary. See U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."); see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike O2 Micro, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction."); ActiveVideo Networks, Inc. v. Verizon Commen's, Inc., 694 F.3d 1312, 1326 (Fed. Cir. 2012). The Court accordingly construes "mobile unit" to have its plain meaning.

H. "means for transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message"	Function: "transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message"
Structure: "input switch 1514, transmit logic 1518, and transmitter 1520; and statutory equivalents thereof"	Structure: Indefinite

The parties submit that this term appears in Claim 1 of the '946 Patent. Dkt. No. 75, Ex. B at p. 7 of 10; Dkt. No. 106, Ex. A at 5. The parties agree that this is a means-plus-function term, and the parties agree upon the claimed function. The parties dispute whether there is sufficient corresponding structure. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction for the corresponding structure: "input switches 1516, transmit logic 1518, transmitter 1520, and antenna 1502; and equivalents thereof."

(1) The Parties' Positions

Plaintiff argues that it has identified sufficient corresponding structure because: "First, this structure is not computer-implemented and therefore, no algorithm is required. Second, the Patent nonetheless discloses an algorithm." Dkt. No. 93 at 11.

Defendant responds that "[Plaintiff's] new arguments, however, confirm that the nonce word 'logic' is not a description of structure, but includes any and all hardware or software/hardware structure that performs the agreed-upon function." Dkt. No. 96 at 13.

Defendant concludes that this disputed term is indefinite. *See id.* at 13-16. "Alternatively," Defendant argues, "the Court should revise the 'corresponding structure' to include 'a switch that allows the user to request retransmission of a message corrupted by errors.' '946 Patent, 15:39-41. That structure is clearly connected to the recited function; without specific inclusion of that key switch, the input switches 1516 are not linked to [the] recited function." Dkt. No. 96 at 16.

Plaintiff replies that Defendant "incorrectly asserts that the *first step* determination of whether a claim term, standing in isolation, is in means-plus-function format applies to the *second step* analysis of the corresponding structure in the specification." Dkt. No. 102 at 4. In other words, Plaintiff argues, "[Defendant] ignores the specification and improperly treats the *specification* terms 'transmit logic 1518' and 'display and storage logic section 1508' as *claim terms*, as if the Court was engaging in the first step of the MPF [(means-plus-function)] analysis." *Id.* Plaintiff concludes that *Williamson* cited by Defendant is inapplicable because "Williamson's analysis of 'module' occurred in the first step of the MPF analysis, where the court considered whether the claim, alone, disclosed sufficient structure to avoid invoking the strictures of § 112(f)." *Id.* at 4-5 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015)).

(2) Analysis

In *LG*, the Court found that the corresponding structure is "input switches 1516, transmit logic 1518, transmitter 1520, and antenna 1502; and equivalents thereof." *LG* at 28. The Court also found:

Although the above-quoted disclosure of "transmit logic 1518" might be read as referring to an algorithm, the specification contains no suggestion that such a structure would not be readily understood by a person of ordinary skill in the art, and "the amount of detail that must be included in the specification depends on

the subject matter that is described and its role in the invention as a whole, in view of the existing knowledge in the field of the invention." *See Typhoon Touch Techs., Inc. v. Dell, Inc.*, 659 F.3d 1376, 1385 (Fed. Cir. 2011).

LG at 27-28.

As Plaintiff has argued, the above-cited *Williamson* case addressed the threshold issue as to whether 35 U.S.C. $\S 112, \P 6$ applies.³

Defendant also cites *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1328-29 (Fed. Cir. 2012), for the proposition that "the indicated structure must limit the claim so as not to allow pure functional claiming." Dkt. No. 96 at 14; *see id.* (citing *Function Media, L.L.C. v. Google Inc.*, 708 F.3d 1310, 1318-19 (Fed. Cir. 2013)). In *Dealertrack*, however, the corresponding structure at issue was a "mainframe, super-mini or minicomputer system, and a database." 674 F.3d at 1329. *Dealertrack* thus merely cited the rule that "in a means-plus-function claim 'in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the [corresponding] structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm." *See id.* at 1328 (citations and internal quotation marks omitted). Here, by contrast, the specification discloses

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³ See Apple Inc. v. Motorola, Inc., 757 F.3d 1286, 1296-97 (Fed. Cir. 2014), abrogated on other grounds by Williamson, 792 F.3d 1339 (citations omitted):

[[]T]he first step in the means-plus-function analysis requires us to determine whether the entire claim limitation at issue connotes "sufficiently definite structure" to a person of ordinary skill in the art. In so doing, we naturally look to the specification, prosecution history, and relevant external evidence to construe the limitation. While this inquiry may be similar to looking for corresponding structure in the specification, our precedent requires it when deciding whether a claim limitation lacking means connotes sufficiently definite structure to a person of ordinary skill in the art. Because these inquiries are distinct, it is possible to find that a claim limitation does not connote sufficiently definite structure despite the presence of some corresponding structure in the specification.

input switches 1516, transmit logic 1518, transmitter 1520, and antenna 1502 as special-purpose structures:

A set of *input switches 1516* is provided to allow the user to input a reply to a received message, or to otherwise generate a message to be transmitted by the mobile transceiver. The input switches 1516 also include a switch that allows the user to request retransmission of a message corrupted by errors. The input switches are connected to *transmit logic 1518* which decodes the signal from the input switches 1516 to generate an output signal to the *transmitter 1520*. The transmitter 1520 generates an appropriately modulated RF signal to be broadcast by *antenna 1502*.

'946 Patent at 15:36-45 (emphasis added).

The Court thus reaches the same conclusions as in *LG*. In particular, the above-quoted disclosure in the specification demonstrates that "transmit logic 1518" is not a general-purpose, programmable structure but rather is a special-purpose structure that aids in preparing to transmit a message such as an indication that a button has been pressed. *See, e.g., Hitachi Consumer Elecs. Co. v. Top Victory Elecs. (Taiwan) Co.*, No. 2:10-CV-260, 2012 WL 5494087, at *59 (E.D. Tex. Nov. 13, 2012) (citing *Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1365-67 (Fed. Cir. 2003) ("By analogy, if a chair is disclosed in the specification that corresponds to the 'means for seating' limitation in a claim, asserting that there are infinite numbers of structures that could make a chair or there are unlimited types of chairs in the world would not necessarily make the claim indefinite.")). Defendant's indefiniteness argument is expressly rejected.

The Court accordingly finds that for the "means for transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message," the function is "transmitting, only upon actuation of the switch, a signal to the communications network requesting retransmission of said specified portion of said message," and the corresponding structure is "input switches 1516, transmit logic 1518, transmitter 1520, and antenna 1502; and equivalents thereof."

I. "means for receiving said specified portion retransmitted from the communications network and for displaying the received specified portion on the display"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "receiving said specified portion retransmitted from the communications network and for displaying the received specified portion on the display"	Function: "receiving said specified portion retransmitted from the communications network and for displaying the received specified portion on the display"
Structure: "receiver 1506 and display 1514; and statutory equivalents thereof"	Structure: Indefinite

The parties submit that this term appears in Claim 1 of the '946 Patent. Dkt. No. 75, Ex. B at pp. 7-8 of 10; Dkt. No. 106, Ex. A at 6. The parties agree that this is a means-plus-function term, and the parties agree on the claimed function. The parties dispute whether there is sufficient corresponding structure. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction for the corresponding structure: "receiver 1506, display and storage logic section 1508 or 1708, and display 1514; and equivalents thereof."

(1) The Parties' Positions

Plaintiff argues that, as has been submitted and found in prior cases, only receiver 1506 and display 1514 are necessary for performing the claimed function. Dkt. No. 93 at 13. Defendant responds that "the Court correctly concluded [in LG] that 'display and storage logic section 1508' is clearly linked or associated with the claimed function," but Defendant argues that "display and storage logic section' 1508, is not a reference to structure." Dkt. No. 96 at 16-17. In particular, Defendant argues that "[s]ection' is a nonce word like device, module,

element and logic." *Id.* at 17. Defendant also argues that the *Katz* exception⁴ does not apply because: "Figure 15 defines receiver 1506 and display 1514 as different from logic 1508. Consequently, logic 1508 is necessarily different from the basic receiver and display functions that would come within the *Katz* exemption." *Id.*

(2) Analysis

In *Sprint*, the parties agreed upon a construction for this term, including that the corresponding structure is "receiver 1506" and "display 1514." *See Sprint* at 76.

In *LG*, the Court found that the corresponding structure is "receiver 1506, display and storage logic section 1508 or 1708, and display 1514; and equivalents thereof." *See LG* at 32-35. The Court reaches the same conclusions here for substantially the same reasons, as follows.

The specification discloses:

The receiver 1506 is connected to a display and storage logic section 1508 to process the received signal. An annunciator 1510 to alert the user that a message has been received is connected to and controlled by the display and storage logic 1508. The annunciator 1510 may commonly include a sound producing device such as a beeper, or a vibrator, or a flashing light.

A set of display controls 1512 to control the display of the mobile transceiver 1500 is connected to the display and storage logic 1508. A *display 1514*, preferably an LCD display, is also connected to the display and storage logic 1508 to display messages and various other information to the user.

⁴ In re Katz Interactive Call Processing Patent Litig., 639 F.3d 1303, 1316 (Fed. Cir. 2011) ("Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' those functions can be achieved by any general purpose computer without special programming. As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions."); accord Ergo Licensing, LLC v. CareFusion 303, Inc., 673 F.3d 1361, 1365 (Fed. Cir. 2012) ("In In re Katz, we held that '[a]bsent a possible narrower construction' of the terms 'processing,' 'receiving,' and 'storing,' the disclosure of a general-purpose computer was sufficient. . . . In other words, a general-purpose computer is sufficient structure if the function of a term such as 'means for processing' requires no more than merely 'processing,' which any general-purpose computer may do without any special programming.") (citations omitted); but see id. ("It is only in the rare circumstances where any general-purpose computer without any special programming can perform the function that an algorithm need not be disclosed.").

'946 Patent at 14:66-15:11 (emphasis added).

Thus, the "receiver 1506," "display and storage logic section 1508," and "display 1514" are disclosed as structures "clearly linked or associated with the claimed function." *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1219 (Fed. Cir. 2003). Because the specification links the claimed function to such structures rather than to a general-purpose computer, no algorithm is required. *See, e.g., Net MoneyIN Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1367 (Fed. Cir. 2008); *WMS Gaming, Inc. v. Int'l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999).

Alternatively and in addition, even if the "display and storage logic section 1508" were deemed to be a general-purpose processor, no algorithm need be disclosed for the functions of receiving and displaying. *See In re Katz*, 639 F.3d at 1316 ("Absent a possible narrower construction of the terms 'processing,' 'receiving,' and 'storing,' . . . those functions can be achieved by any general purpose computer without special programming. As such, it was not necessary to disclose more structure than the general purpose processor that performs those functions."); *see also* Dkt. No. 93-5, Jan. 7, 2016 Kesan Decl. at ¶¶ 142-146. Contrary to Defendant's argument, the distinct disclosure of "receiver 1506" and "display 1514" does not undermine this finding because the functions of receiving and displaying, at least in the context here at issue, involve some degree of processing. *Cf. In re Dossel*, 115 F.3d 942, 947 (Fed. Cir. 1997) ("it is well within the realm of common experience that computers are used to generate images for display by mathematically processing digital input"). Defendant's argument regarding the purported failure to meet the algorithm requirement is therefore rejected.

The Court accordingly finds that for the "means for receiving said specified portion retransmitted from the communications network and for displaying the received portion

on the display," the function is "receiving said specified portion retransmitted from the communications network and displaying the received portion on the display," and the corresponding structure is "receiver 1506, display and storage logic section 1508 or 1708, and display 1514; and equivalents thereof."

V. DISPUTED TERMS IN U.S. PATENT NO. 5,809,428

The '428 Patent is titled "Method and Device for Processing Undelivered Data Messages in a Two-Way Wireless Communications System." The '428 Patent issued on September 15, 1998, and bears a filing date of July 25, 1996. The '428 Patent incorporates by reference the '946 Patent. *See* '428 Patent at 1:36-39. In general, the '428 Patent relates to acknowledging receipt of data messages and probe messages. The Abstract of the '428 Patent states:

A network operations center transmits a data message to a wireless mobile unit and waits for a data acknowledgment message. If no acknowledgment is received within a specified time, the network operations center sends a probe message to attempt to locate the mobile unit and waits for a probe acknowledgment message. If still no acknowledgment, the network operations center marks the data message as undelivered and stores it for future delivery. If a mobile unit receives a probe message while its transmitter is powered off, it displays an indication to the subscriber that there is a message waiting to be delivered. The subscriber can then dial into the network operations center to retrieve the message. Or, when the transmitter of the mobile unit is powered back on, the mobile unit sends a registration message to the network operations center; and upon receiving the registration message, the network operations center automatically re-transmits the undelivered data message to the mobile unit.

The Court previously addressed the '428 Patent in *Amazon* and *LG*, and relevant findings therein are set forth as to particular disputed terms, below. *Blackberry* also addressed the '428 Patent.

A. "probe acknowledgement message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a message generated by a mobile unit to acknowledge receipt of a probe message
In the alternative: "plain meaning"	transmitted from a network operations center"

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 2 of 10. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning (reject Defendant's proposal as redundant and unnecessary in light of Defendant's use of 'acknowledge' in its proposal and in light of the parties' agreed-upon construction of 'probe message')."

(1) The Parties' Positions

Plaintiff argues no construction is needed because this term is readily understandable, and "the Court has previously rejected imposing the phrase 'transmitted from a network operations center' and should do so again." Dkt. No. 93 at 15. Defendant responds that its proposed construction "will be helpful to the jury" and "is consistent with the agreed construction of 'probe message." Dkt. No. 96 at 29. Plaintiff replies that the parties' agreed-upon construction for "probe message" will adequately inform the jury as to the meaning of "probe acknowledgement message" because "[t]he Jury would not be confused regarding the term 'acknowledgment,' nor has [Defendant] shown otherwise." Dkt. No. 102 at 10.

(2) Analysis

Claim 4 of the '428 Patent recites (emphasis added):

- 4. A wireless mobile unit for receiving and transmitting messages from and to a network operations center comprising:
- means for receiving data and probe messages from the network operations center;

a transmitter:

means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by *said transmitter*;

means for generating, upon receiving a probe message, a *probe* acknowledgment message, said probe acknowledgment message being transmitted by said transmitter;

means for powering the transmitter on and off;

means for determining whether a probe message has been received while said transmitter was powered off; and

means for generating, upon power restoration to the transmitter, a registration message if a probe message has been received while the transmitter was powered off, said registration message being transmitted by said transmitter.

The parties have agreed that the term "probe message" in Claim 4 of the '428 Patent means "a message that is generated by the network operations center to locate a mobile unit." Dkt. No. 75 at Ex. A.

The constituent term "acknowledgement" is sufficiently clear on its face and requires no construction. Indeed, Defendant's proposed construction—"a message generated by a mobile unit to *acknowledge* receipt of a probe message transmitted from a network operations center"—includes the word "acknowledge." Finally, as to Defendant's proposal that the acknowledgement is "generated by a mobile unit," the surrounding claim language (quoted above) is sufficiently clear in this regard.

The Court therefore expressly rejects Defendant's proposed construction. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207; *ActiveVideo*, 694 F.3d at 1326. The Court accordingly construes "probe acknowledgment message" to have its plain meaning.

B. "registration message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a message that a mobile unit generates to update its location"
In the alternative: "plain meaning"	

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 4 of 10; Dkt. No. 106, Ex. A at 13. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "a message that a mobile unit generates to identify itself to the network operations center."

(1) The Parties' Positions

Plaintiff argues that "[Defendant's] construction improperly limits the function of the registration message to updating the location of the mobile unit. The '428 Patent teaches that a registration message is also used to trigger receipt of any undelivered data messages stored at the network." Dkt. No. 93 at 15 (citing '428 Patent at 8:40-42). Plaintiff also argues that Defendant's proposal of "location" "could be mistakenly conflated with a physical location, as other . . . defendants have mistakenly done." Dkt. No. 93 at 15.

Defendant responds that the Court should adopt the *Blackberry* construction—"a message that is generated to update the location of a mobile unit"—"because it correctly captures the mobile unit's purpose in generating the 'registration message." Dkt. No. 96 at 29; *Blackberry*, Ex. A at 5. Plaintiff's reply brief does not separately address this disputed term. *See* Dkt. No. 102.

(2) Analysis

Claim 4 of the '428 Patent recites, in relevant part: "means for generating, upon power restoration to the transmitter, a registration message if a probe message has been received while the transmitter was powered off, said registration message being transmitted by said transmitter."

The specification discloses:

FIG. 8 shows a flow diagram depicting a method of transmitting undelivered data messages upon mobile unit registration, in accordance with a preferred embodiment of the present invention. The process starts when network operations center 100 receives through message receiving unit 104 an incoming message which MTD module 302 determines to be a *registration message* (step 800). A *registration message* may be sent by a mobile unit upon power restoration to the transmitter of the mobile unit if a probe message has been received when the transmitter is powered off. RMP module 306 then updates in memory storage unit 110 the *location* of the corresponding mobile unit as described above (step 802) and transmits through message transmitting unit 108 any undelivered data messages stored in memory storage unit 110 (step 804).

'428 Patent at 8:28-42 (emphasis added); *see id.* at 7:30-48 (disclosing updating location in context of probe acknowledgement message).

On balance, Defendant's proposal of requiring a "location" pertains to specific features of particular disclosed embodiments that should not be imported into the claims. *See, e.g., Comark*, 156 F.3d at 1187; *Phillips*, 415 F.3d at 1323. Further, referring to "location" would tend to confuse rather than clarify the scope of the claims by implying a requirement of signaling a physical or geographic location.

The Court therefore rejects Defendant's proposed construction. Instead, the word "registration" can be properly given meaning in the context of the specification by requiring a registration message to provide the identity of a mobile unit. The Court accordingly construes "registration message" to mean "a message that a mobile unit generates to identify itself to the network operations center."

C. "data message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"a message containing content that is viewable by a user on the display"
In the alternative: "plain meaning"	

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 5 of 10; Dkt. No. 106, Ex. A at 14. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "plain meaning."

(1) The Parties' Positions

Plaintiff argues that "[Defendant's] construction is unnecessary and limits the scope of the term to a preferred embodiment." Plaintiff also argues that the construction "goes against the intrinsic record" because "[t]he '946 Patent, which is incorporated by reference by the '428 Patent, teaches that a received message may be a voice message." Dkt. No. 93 at 16 (citing '946 Patent at 17:55-58).

Defendant responds that "[n]owhere in the specification is there a disclosure that suggests data messages are anything other than a message 'to be viewed by the subscriber." Dkt. No. 96 at 30 (quoting '428 Patent at 6:22-24). Defendant also argues that "[t]he portion of the ['946] specification on which [Plaintiff] relies [as to a 'voice message'] is about connections between a mobile unit and other electronic devices of the user, '946 Patent, 17:42-55, not about a data message received from [sic] 'from the network operations center' by a mobile unit, as required by Claim 1." Dkt. No. 96 at 30. Plaintiff replies that "[v]oice messages are obviously data messages, regardless of how they are nominated in other patents." Dkt. No. 102 at 10.

(2) Analysis

Claim 4 of the '428 Patent recites, in relevant part (emphasis added): "means for receiving data and probe messages from the network operations center"; "a transmitter"; and "means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter."

Defendant's proposal essentially amounts to a requirement that all data received by a mobile unit must be for viewing by the user. No such limitation is apparent in the specification, and the above-quoted claim language places no apparent limits on the type of data that can be contained in a data message. Instead, the context of Claim 4 demonstrates that a "data message" need merely be distinct from a "probe message." The specification sets forth this distinction as well. *See*, *e.g.*, '428 Patent at 4:36-38. Similarly, the specification notes that data messages sent by a mobile unit are distinguishable from "acknowledgment messages" and "registration messages." *See*, *e.g.*, *id.* at 4:23-25.

The Court therefore expressly rejects Defendant's proposed construction. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207; *ActiveVideo*, 694 F.3d at 1326. The Court construes "data message" to have its plain meaning.

D. "powering the transmitter on and off"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
No construction necessary	"powering the transmitter on and off independently of the power to the receiver"

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 3 of 10; Dkt. No. 106, Ex. A at 11.

Plaintiff argues that Defendant's proposed construction "improperly limits the term to only one exemplary embodiment." Dkt. No. 93 at 16. Defendant responds: "The immediately following limitation is 'means for determining whether a probe message has been received while said transmitter was powered off.' This context strongly suggests that the mobile unit remains operational even though the transmitter is powered off. The specification confirms that to be the case." Dkt. No. 96 at 28. Plaintiff replies that it "relies upon its opening brief for support of its construction" for this disputed term. Dkt. No. 102 at 8 n.25.

The parties' dispute as to "powering the transmitter on and off" appears to be a dispute as to the function of the means-plus-function term "means for powering the transmitter on and off." Although the parties have presented "powering the transmitter on and off" as a distinct disputed term, the Court will address "powering the transmitter on and off" as part of its construction of the term "means for powering the transmitter on and off" below.

E. "means for powering the transmitter on and off"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "powering the transmitter on and off"	Function: "powering the transmitter on and off" (as construed)
Structure:	
"transmitter power switch 504; mobile unit	Structure:
power switch 508; and statutory equivalents"	"transmitter power switch 504"

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at pp. 3-4 of 10; Dkt. No. 106, Ex. A at 12. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "Function: 'powering the transmitter on and off independently of the power to the receiver'"; and "Structure: 'transmitter power switch 504; and equivalents thereof.'"

(1) The Parties' Positions

Plaintiff argues that "[b]oth transmitter power switch 504 and mobile unit power switch 508 allow the user to turn on and off transmitter 202." Dkt. No. 93 at 17. Defendant responds that "only transmitter power switch 504 is linked to the disclosure concerning making the determination when power comes back up." Dkt. No. 96 at 28.

(2) Analysis

Claim 4 of the '428 Patent recites (emphasis added):

4. A wireless mobile unit for receiving and transmitting messages from and to a network operations center comprising:

means for receiving data and probe messages from the network operations center;

a transmitter:

means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter;

means for generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter;

means for powering the transmitter on and off;

means for determining whether a probe message has been received while said transmitter was powered off; and

means for generating, upon power restoration to the transmitter, a registration message if a probe message has been received while the transmitter was powered off, said registration message being transmitted by said transmitter.

In *Sprint*, the Court's preliminary construction proposed the corresponding structure to be "transmitter power switch 504; and equivalents thereof." *See Sprint* at 61. At the March 7, 2014 hearing in *Sprint*, the parties agreed to the Court's preliminary construction. *See id.* Also, the parties in *Amazon* agreed to this same corresponding structure. *See Amazon* at 64.

The specification discloses that the entire mobile unit (including both the transmitter and receiver) can be powered off, and the specification also discloses that the transmitter or receiver can be independently powered off:

Transmitter power switch 504 preferably allows a subscriber to turn on or off transmitter 202 of mobile unit 200. Receiver power switch 506 preferably allows a subscriber to turn on or off receiver 204 of mobile unit 200. Mobile unit power switch 508 preferably allows a subscriber to turn on or off the entire mobile unit 200 including transmitter 202, receiver 204, and display 206.

'428 Patent at 6:65-7:4.

Further, the specification discloses:

RMG module 404 generates registration messages. In a preferred embodiment of the present invention, as transmitter 202 is powered on, RMG module 404 checks memory 212 for an indication that a probe message has been received when transmitter 202 is off. If such an indication exits, then RMG module 404 creates a registration message and forwards it to transmitter 202.

'428 Patent at 6:42-48. Presumably, a probe message could be received while the transmitter is powered off only if the receiver was nonetheless powered on. The disclosure thus reinforces that the transmitter can be powered off without powering off the receiver. *See AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1278 (Fed. Cir. 2011) ("a construction that renders the claimed invention inoperable should be viewed with extreme skepticism").

The Court therefore finds that for the "means for powering the transmitter on and off," the function is "powering the transmitter on and off independently of the power to the receiver," and the corresponding structure is "transmitter power switch 504; and equivalents thereof."

F. "means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "generating, upon receiving a data message, a data acknowledgement message"	Function: "generating, upon receiving a data message, a data acknowledgment message"
Structure: "receiver 204, MTD Module 408, AMG Module 402, Transmitter 202; and statutory equivalents.	Structure: Indefinite
To the extent the Court determines that the algorithm rule applies, the structure would be receiver 204, MTD Module 408, AMG Module 402, Transmitter 202; and statutory equivalents, performing the algorithm recited in the claim (generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter) and as further described in the specification at col. 6, ll. 13-20 and col. 6, ll. 37-41."	

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at pp. 2-3 of 10; Dkt. No. 106, Ex. A at 9. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "indefinite because of lack of corresponding structure."

(1) The Parties' Positions

Plaintiff argues that "the identified corresponding structure must include the structure that performs the entire function—not an isolated step (*i.e.* 'create') among the steps necessary to perform the full function," and "[t]he patent explicitly discloses specific discrete circuits for performing the full recited function." Dkt. No. 93 at 18-19. Alternatively, if the algorithm rule is

found to apply, Plaintiff argues that the specification discloses a sufficient algorithm. *See id.* at 19-23 (citing '428 Patent at 6:12-40).

Defendant responds that collateral estoppel applies based on the Court's indefiniteness finding as to this term in *Amazon*. Dkt. No. 96 at 17-18. Alternatively, Defendant argues that the Court should reach the same conclusion here for the same reasons as in *Amazon*. *See id.* at 18-24. In particular, Defendant urges that the Court correctly found that the algorithm requirement applies and that the *Katz* exception to the algorithm requirement does not apply. *Id.* at 22. Defendant also argues that Plaintiff's current proposal for the claimed function is incorrect because "[t]he final clause in each limitation states that the separately-recited transmitter sends 'said' message after the message has been generated by the 'means for generating.'" *Id.* at 21.

Plaintiff replies that collateral estoppel does not apply because of "the majority rule that where the prior litigation resulted in 'a voluntary settlement before a final judgment was entered ... collateral estoppel does not bind the later court to the claim construction of the previous court." Dkt. No. 102 at 7 (quoting *Paltalk Holdings, Inc. v. Microsoft Corp.*, No. 2:06-CV-367, 2008 WL 4830571, at *4 (E.D. Tex. July 29, 2008)). Plaintiff also notes that the parties here dispute additional structures beyond the "acknowledgement message generation (AMG) module 402" that was addressed in *Amazon*. Dkt. No. 102 at 8.

As to the proper construction, Plaintiff replies that "the final clause is part of the claimed function because it is part of the 'generating' limitation," and "[Plaintiff's] inclusion of the transmitter as structure . . . does not render the transmitter limitation superfluous." *Id.* at 8-9. Finally, Plaintiff urges that "[t]o the extent the Court determines the algorithm rule applies, [Plaintiff] identifies an algorithm within the specification by which the structure could perform the function. No more is required." *Id.* at 9.

(2) Analysis

In *Sprint*, the Court found that the corresponding structure is "acknowledgement message generating module 402 and/or memory 212 and processor 406; and equivalents thereof." *Sprint* at 63. The Court rejected the *Sprint* defendants' indefiniteness argument because the defendants did not "present any evidence of the understanding of a person of ordinary skill in the art, such as through an expert declaration or expert testimony," as required by the decision of the Court of Appeals for the Federal Circuit in *elcommerce.com*, *Inc. v. SAP AG*, 745 F.3d 490 (Fed. Cir. 2014). But the Federal Circuit later vacated the *elcommerce* decision. *See elcommerce.com*, *Inc. v. SAP AG*, No. 2011-1369, 564 F. App'x 599 (Fed. Cir. June 6, 2014).

In *Amazon*, which this Court decided after the Federal Circuit vacated *elcommerce*, the Court found: "the structure proposed by Plaintiff amounts to a general-purpose computer, thereby triggering the algorithm requirement"; "[t]he *Katz* exception [to the algorithm requirement] ... does not apply;" and "the 'means for generating upon receiving . . .' terms suffer from a lack of corresponding structure and lack of an algorithm." *Amazon* at 44-45; *see id.* at 45 ("[T]he 'means for generating upon receiving . . .' terms suffer from a lack of corresponding structure and lack of an algorithm for substantially the same reasons discussed above regarding the 'means for determining . . .' term."); *see also id.* at 26-41 (discussing the "means for determining . . ." term). The Court concluded that these terms are indefinite.

Defendant argues the Claim Construction Memorandum and Order in *Amazon* constitutes a "judgment" for purposes of satisfying the elements of collateral estoppel. Plaintiff counters by citing authority for the proposition that where a case ends with a voluntary settlement, claim construction findings in that case do not have any collateral estoppel effect.

On the merits, the Court reaches the same conclusion here as in *Amazon* for substantially the same reasons set forth therein. *See Amazon* at 41-45; *see also id.* at 26-41. Moreover, the Court expressly rejects Plaintiff's argument that the claimed function itself includes receiving and transmitting. Alternatively, collateral estoppel applies. *See, e.g., Mendenhall v. Barber-Greene Co.*, 26 F.3d 1573, 1577 (Fed. Cir. 1994); *Dana v. E.S. Originals, Inc.*, 342 F.3d 1320, 1324 (Fed. Cir. 2003); *DietGoal Innovations LLC v. Chipotle Mexican Grill, Inc.*, 70 F. Supp. 3d 808, 811-12 (E.D. Tex. 2014) (Bryson, J.).

The Court accordingly finds that the term "means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter" is indefinite.

G. "means for generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter"	Function: "generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter"
Structure: "receiver 204; MTD Module 408; PMP Module 410; AMG Module 402; and Transmitter 202; and statutory equivalents.	Structure: Indefinite
To the extent the Court determines that the algorithm rule applies, the structure would be receiver 204; MTD Module 408; PMP Module 410; AMG Module 402; and Transmitter 202; and statutory equivalents[], performing the algorithm recited in the claim (generating upon	
receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter) and as further described in the specification at col. 6, ll. 13-23, col. 6, ll. 28-32, and col. 6, ll. 37-41"	

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 3 of 10; Dkt. No. 106, Ex. A at 10. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction: "indefinite because of lack of corresponding structure."

Plaintiff incorporates its arguments as to the "means for generating, upon receiving a data message . . ." term addressed above, and Plaintiff urges that "the full function includes all necessary operations, and associated steps, to perform the full function of generating a probe acknowledgement message (*i.e.* receiving a message, processing the message, creating a probe

acknowledgement message, and transmitting the probe acknowledgement message, along with the necessary intermediary operations)." Dkt. No. 93 at 23-24; *see id.* at 23-25; *see also* Dkt. No. 102 at 6-10. Defendant argues this term together with the "means for generating, upon receiving a data message . . ." term addressed above. *See* Dkt. No. 96 at 17-24.

In *Amazon*, the Court found this term indefinite for the same reasons as for the "means for generating, upon receiving a data message . . ." term, which is addressed above. *See Amazon* at 41-45; *see also id.* at 26-41. On the merits, the Court reaches the same conclusion here as in *Amazon* for substantially the same reasons set forth therein. *See id.* at 26-45. Moreover, the Court expressly rejects Plaintiff's argument that the claimed function itself includes receiving and transmitting. Alternatively, collateral estoppel applies. *See, e.g., Mendenhall*, 26 F.3d at 1577; *Dana*, 342 F.3d at 1324; *DietGoal*, 70 F. Supp. 3d at 811-12.

The Court accordingly finds that the term "means for generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter" is indefinite.

H. "means for generating, upon power restoration to the transmitter, a registration message"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "generating, upon power restoration to the transmitter, a registration message"	Function: "generating, upon power restoration to the transmitter, a registration message"
Structure: "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and statutory equivalents thereof"	Structure: Indefinite

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at pp. 4-5 of 10. Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction for the corresponding structure: "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and equivalents thereof."

(1) The Parties' Positions

Plaintiff argues that "[t]he full function involves restoring power to the transmitter, checking whether a probe message has been received; creating a registration message; and transmitting the registration message." Dkt. No. 93 at 25. Plaintiff also submits that Defendant's argument that the specification does not disclose how to create a message improperly "conflates issues of enablement with issues of disclosure under § 112(f)." *Id.* at 27.

Defendant responds that the disclosure identified by the Court in *Amazon* as disclosing an algorithm is insufficient because it "does not disclose [Plaintiff's] specific way of performing the claimed function, but instead encompasses all ways of generating a registration message" and "merely restates the function to be performed." Dkt. No. 96 at 24. Defendant also argues that the RMG module cited by Plaintiff is "is not a circuit, or family of circuits, but is simply a generic description for software or hardware that performs a specified function." *Id.* at 26 (citation and internal quotation marks omitted).

Plaintiff replies as to this term together with the other "means for generating . . ." terms addressed above. *See* Dkt. No. 102 at 6-10.

(2) Analysis

In *Sprint*, the Court found that the corresponding structure was "registration message generation module 404 and/or memory 212 and processor 406; and equivalents thereof." *Sprint*

at 60. The Court rejected the *Sprint* defendants' indefiniteness argument because the defendants did not "present any evidence of the understanding of a person of ordinary skill in the art, such as through an expert declaration or expert testimony," as required by *elcommerce*. *Id*. (citing 745 F.3d 490).

In *Amazon*, which this Court decided after the Federal Circuit vacated *elcommerce*, the Court found that the algorithm requirement applies to the term here at issue, but the Court also found that the specification discloses "a sufficient algorithm, in prose form." *Amazon* at 50. The Court in *Amazon* concluded that the corresponding structure is "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and equivalents thereof." *Id.* at 51.

The Court reaches the same conclusions here as in *Amazon* for substantially the same reasons set forth therein. *See Amazon* at 46-51. In particular, the specification discloses:

RMG module 404 generates registration messages. In a preferred embodiment of the present invention, as transmitter 202 is powered on, RMG module 404 checks memory 212 for an indication that a probe message has been received when transmitter 202 is off. If such an indication exits, then RMG module 404 creates a registration message and forwards it to transmitter 202.

'428 Patent at 6:41-47.

The Court therefore finds that for the "means for generating, upon power restoration to the transmitter, a registration message," the function is "generating, upon power restoration to the transmitter, a registration message," and the corresponding structure is "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and equivalents thereof."

I. "means for determining whether a probe message has been received while said transmitter was powered off"

Plaintiff's Proposed Construction	Defendant's Proposed Construction
This term is governed by 35 U.S.C. § 112(f)	This term is governed by 35 U.S.C. § 112(f)
Function: "determining whether a probe message has been received while said transmitter was powered off"	Function: "determining whether a probe message has been received while said transmitter was powered off"
Structure: "registration message generation module 404 or probe message processing module 410, and statutory equivalents, and the algorithm: 'check memory for control information indicating that the mobile unit has received a probe message when the transmitter is powered off"	Structure: Indefinite

The parties submit that this term appears in Claim 4 of the '428 Patent. Dkt. No. 75, Ex. B at p. 4 of 10; Dkt. No. 106, Ex. A at 12. The parties agree that this is a means-plus-function term, and the parties agree upon the claimed function. The parties dispute whether there is sufficient corresponding structure.

Shortly before the start of the February 16, 2016 hearing, the Court provided the parties with the following preliminary construction for the corresponding structure: "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and equivalents thereof."

(1) The Parties' Positions

Plaintiff argues that "the patent discloses the structure as special-purpose hardware rather than computer-implemented structure." Dkt. No. 93 at 29. Alternatively, Plaintiff argues that "[t]he patent also discloses an algorithm in the specification." *Id*.

Defendant responds that "RMG module 404 is not hardware, the algorithm rule applies," and "[t]he patent fails to disclose an algorithm." Dkt. No. 96 at 27. Defendant argues that "[Plaintiff's] efforts to use an expert declaration to transform a plain statement of function into an algorithm (albeit one that is the same as pure functional claiming) is meritless." *Id*.

(2) Analysis

In *Sprint*, the Court found that the corresponding structure was "registration message generation module 404 and/or memory 212 and processor 406; and equivalents thereof." *Sprint* at 63. The Court rejected the *Sprint* defendants' indefiniteness argument because the defendants did not "present any evidence of the understanding of a person of ordinary skill in the art, such as through an expert declaration or expert testimony," as required by *elcommerce* at that time. *Id*. at 62 (citing 745 F.3d 490).

In *Amazon*, the parties agreed that the corresponding structure is "registration message generating module 404; or registration message generating module 404 and memory 212; and equivalents thereof."

Here, the Court finds that the *Katz* exception to the algorithm requirement does not apply because the claimed function is not analogous to functions such as "processing," "receiving," or "storing" that can be performed by any general-purpose computer. *See In re Katz*, 639 F.3d at 1316. As to the algorithm requirement, the specification discloses:

RMG module 404 generates registration messages. In a preferred embodiment of the present invention, as transmitter 202 is powered on, RMG module 404 checks memory 212 for an indication that a probe message has been received when transmitter 202 is off. If such an indication exits, then RMG module 404 creates a registration message and forwards it to transmitter 202.

'428 Patent at 6:41-47. This amounts to sufficient disclosure of an algorithm in prose form. *See*, *e.g.*, *Typhoon Touch Techs.*, *Inc.* v. *Dell*, *Inc.*, 659 F.3d 1376, 1386 (Fed. Cir. 2011) ("Indeed, the

mathematical algorithm of the programmer is not included in the specification. However, as precedent establishes, it suffices if the specification recites in prose the algorithm to be implemented by the programmer.").

The Court finds that for the "means for determining whether a probe message has been received while said transmitter was powered off," the claimed function is "determining whether a probe message has been received while said transmitter was powered off," and the corresponding structure is "registration message generation (RMG) module 404, and memory 212, configured to perform the algorithm set forth in the '428 Patent at 6:41-47; and equivalents thereof."

VI. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The Court finds indefinite the terms "means for generating, upon receiving a data message, a data acknowledgment message, said data acknowledgment message being transmitted by said transmitter" and "means for generating, upon receiving a probe message, a probe acknowledgment message, said probe acknowledgment message being transmitted by said transmitter," which appear in Claim 4 of the '428 Patent.

The parties are ordered to not refer to each other's claim construction positions in the presence of the jury. Likewise, in the presence of the jury, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court. The Court's reasoning in this order binds the testimony of any witnesses, but any reference to the claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

SIGNED this 12th day of April, 2016.

RÒY S. PAYNE

UNITED STATES MAGISTRATE JUDGE

APPENDIX A

<u>Term</u>	Parties' Agreement
"probe message" ('428 Pat., Cl. 4)	"a message that is generated by the network operations center to locate a mobile unit"
"means for receiving data and probe messages from the network operations center"	This limitation is governed by 35 U.S.C. § 112(f).
('428 Pat., Cl. 4)	Function: "receiving data and probe messages from the network operations center"
	Structure: "receiver 204, and statutory equivalents thereof"
"means for storing information indicating that a probe message has been received when the transmitter of the mobile unit is powered off"	This limitation is governed by 35 U.S.C. § 112(f). Function:
('428 Pat., Cl. 7)	"storing information indicating that a probe message has been received when the transmitter of the mobile unit is powered off"
	Structure: "memory 212, and statutory equivalents thereof"
"a switch actuatable"	"a switch that requires user activation"
('946 Pat., Cl. 1)	
"only upon actuation of the switch"	"only upon user activation of the switch"
('946 Pat., Cl. 1)	

"means for receiving a radio frequency signal from the communication network including a retransmitted message and an error correcting code" ('946 Pat., Cl. 3)	This limitation is governed by 35 U.S.C. § 112(f). Function: "receiving a radio frequency signal from the communications network including a retransmitted message and an error correcting code" Structure: "receiver 1506, and statutory equivalents thereof"
"error correcting code"	"plain meaning"
('946 Pat., Cl. 3)	
"only upon receipt of the indication"	"plain meaning"
('946 Pat., Cl. 8)	

Dkt. No. 75 at Ex. A; Dkt. No. 106, Ex. A at 1, 6, 8 & 15.